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NOTICE OF ALLOWANCE AND FEE(S) DUE

41505 7590 04/22/2009 WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891 EXAMINER

JANAKIRAMAN, NITHYA

ART UNIT PAPER NUMBER

DATE MAILED: 04/22/2009

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,450	12/12/2003		Eric Traut		MVIR-0100 / 305423.01	9680	
TITLE OF INVENTION:	SYSTEMS AND I	METHODS FOR	BIMODAL	DEVICE	VIRTUALIZATION	OF ACTUAL AND ID	EALIZED
HARDWARE-BASED DEVICES							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$O	\$1810	07/22/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:	If the SMALL ENTITY is shown as NO:
A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.	A. Pay TOTAL FEE(S) DUE shown above, or
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or	B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u> Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

				or <u>Fax</u>	(57	1)-273-2885			
INSTRUCTIONS: This appropriate. All further of indicated unless correcte maintenance fee notificat	d below or directed oth	for traning the linerwise	smitting the ISSU Patent, advance of in Block 1, by (a	JE FEE and PUBLIC rders and notification a) specifying a new c	CATI of n orres	ON FEE (if requ naintenance fees v pondence address;	ired). H /ill be and/or	Blocks 1 through 5 sh mailed to the current of (b) indicating a separ	ould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
41505 WOODCOCK CIRA CENTRE, 2929 ARCH STF	IICROSOFT			C		e			
PHILADELPHIA	A, PA 19104-2891								(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/734,450	12/12/2003			Eric Traut			MVII	R-0100 / 305423.01	9680
TITLE OF INVENTIO HARDWARE-BASED I		MET	THODS FOR B	IMODAL DEVICE	VIR	TUALIZATION	OF A	ACTUAL AND IDE	ALIZED
APPLN. TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE I	UE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$300		\$0		\$1810	07/22/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	3				
JANAKIRAMA	AN, NITHYA		2123	703-024000	—				
CFR 1.363). ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽¹⁾ the names of up to 3 registered patent attorneys ⁽²⁾ the name of a single firm (having as a member a ⁽²⁾ the name of a single firm (having as a member a registered patent attorneys or agent) and the names of up to ⁽²⁾ registered patent attorneys or agents. If no name is ⁽²⁾ itsed, no name will be printed. ⁽²⁾ the name of a single printed. ⁽²⁾ the name of a single printed. ⁽³⁾ ⁽³⁾ ⁽⁴⁾ ⁽⁴⁾ NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) ⁽²⁾						cument has been filed for			
4a. The following fee(s) a Issue Fee Publication Fee (No	re submitted: o small entity discount p	permitte	4t ed)	 D. Payment of Fee(s): (A check is enclos Payment by credition 	(Plea ed.	se first reapply and d. Form PTO-2038	ny prev	viously paid issue fee s	
Advance Order - #	of Copies			The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
5. Change in Entity Stat	us (from status indicated SMALL ENTITY state		· · · · · · · · · · · · · · · · · · ·	b. Applicant is no	o lon	ger claiming SMA	LL EN	FITY status. See 37 CF	R 1.27(g)(2).
									e assignee or other party in
Authorized Signature						Date			
Typed or printed name						Registration N	lo		
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, Virginia 2231 Under the Paperwork Red	application form to the ons for reducing this bu- irginia 22313-1450. DC 13-1450.	e USPT rden, sł D NOT	O. Time will vary nould be sent to th SEND FEES OR (e Chief Information C COMPLETED FORM	indiv Office IS TC	idual case. Any co r, U.S. Patent and D THIS ADDRESS	mment Traden S. SENI	is on the amount of tim nark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450, number.

	ITED STATES PATE	NT AND TRADEMARK OFFICE	UNITED STATES DEPAR United States Patent and ' Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.uspto.gov	Trademark Office OR PATENTS		
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/734,450	12/12/2003	Eric Traut	MVIR-0100 / 305423.01	9680		
41505 75	90 04/22/2009		EXAMINER			
WOODCOCK W	ASHBURN LLP (M	JANAKIRAMAN, NITHYA				
CIRA CENTRE, 1		ART UNIT	PAPER NUMBER			
2929 ARCH STRE PHILADELPHIA,			2123 DATE MAILED: 04/22/200	9		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 426 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 426 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

AND A

	Application No.	Applicant(s)					
	10/734,450	TRAUT, ERIC					
Notice of Allowability	Examiner	Art Unit					
	NITHYA JANAKIRAMAN	2123					
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this a or other appropriate communicati IGHTS. This application is subject	application. If not includ on will be mailed in due	ed course. THIS				
1. X This communication is responsive to <u>3/26/09</u> .							
2. 🔀 The allowed claim(s) is/are <u>1-3 and 5-40</u> .							
 3. Acknowledgment is made of a claim for foreign priority under a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do 	e been received. e been received in Application No.		tion from the				
International Bureau (PCT Rule 17.2(a)).							
* Certified copies not received:							
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		ly complying with the re	quirements				
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			IOTICE OF				
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.						
(a) 🔲 including changes required by the Notice of Draftspers	son's Patent Drawing Review(PT	O-948) attached					
1)							
(b) including changes required by the attached Examiner' Paper No./Mail Date	s Amendment / Comment or in the	e Office action of					
	Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).						
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.							
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. 🗌 Notice of Informa	Patent Application					
2.		6. ☐ Interview Summary (PTO-413), Paper No./Mail Date					
3. Information Disclosure Statements (PTO/SB/08),	7. 🗌 Examiner's Amen	idment/Comment					
Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Statement of Reasons for Allowance						
	9. 🗌 Other						

Application/Control Number: 10/734,450 Art Unit: 2123

DETAILED ACTION

This action is in response to the submission filed on 3/26/09. Claims 1-3, 5-40 are presented for examination.

Allowable Subject Matter

1. Claims 1-3 and 5-40 are allowed.

2. The following is an examiner's statement of reasons for allowance: While Jones and

Zimmer teach a method for a bimodal virtual device, neither of these references, taken either

alone or in combination with the prior art of record disclose:

(Claim 1) "second mode comprising an idealized mode, the idealized mode configured to send input/output instructions from a guest operating system to a host operating system, the processor requiring a second amount of cycles to send the input/output instructions, the second amount of cycles lower than the first";

(Claim 11) "a second mode of the bimodal virtual device, the second mode optimized to send input/output instructions from a guest operating system to a host operating system, the processor requiring a second amount of processor cycles to effectuate the second mode, wherein the second amount of processor cycles is less than the first";

(Claim 21) "the processor configured to operate in the second mode by executing instructions that send input/output instructions from a guest operating system to a host operating system, the processor requiring a second amount of processor cycles to send the input/output instructions, the second amount of processor cycles lower than the first"; and

(Claim 31) "the second mode configured to send input/output instructions from a guest operating system to a host operating system, the second mode requiring a second amount of processor cycles to send the input/output instructions, the second amount of processor cycles being less than the first",

in combination with the remaining elements and features of the claimed invention. It is for these

reasons that the applicant's invention defines over the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Application/Control Number: 10/734,450 Art Unit: 2123

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NITHYA JANAKIRAMAN whose telephone number is (571)270-1003. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571)272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nithya Janakiraman/ Examiner, Art Unit 2123

> /Paul L Rodriguez/ Supervisory Patent Examiner, Art Unit 2123